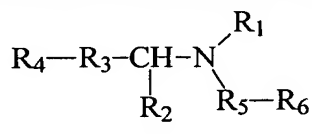


### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

1. **(Original)** A method for rescuing damaged nerve cells in a patient, comprising:  
administering to a patient having damaged nerve cells an amount of a deprenyl  
compound, wherein the deprenyl compound is represented by the structure of Formula I:



wherein

R<sub>1</sub> is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl;

R<sub>2</sub> is hydrogen or alkyl;

R<sub>3</sub> is a single bond, alkylene, or -(CH<sub>2</sub>)<sub>n</sub>-X-(CH<sub>2</sub>)<sub>m</sub>;

in which X is O, S, or N-methyl; m is 1 or 2; and n is 0, 1, or 2;

R<sub>4</sub> is alkyl, alkenyl, alkynyl, heterocyclyl, aryl or aralkyl; and

R<sub>5</sub> is alkylene, alkenylene, alkynylene and alkoxylenes; and

R<sub>6</sub> is C<sub>3</sub>-C<sub>6</sub> cycloalkyl or

-C≡CH; or

R<sub>2</sub> and R<sub>4</sub>-R<sub>3</sub> are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group;

and pharmaceutically acceptable salts thereof;

such that rescuing of damaged nerve cells occurs in the patient;

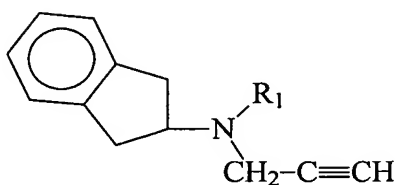
with the proviso that the deprenyl compound is not selected from the group consisting of deprenyl, pargyline, AGN-1133, or AGN1135.

2. **(Cancelled)**

3. **(Currently Amended)** The method of claim 2 1, wherein R<sub>1</sub> is a group that can be removed *in vivo*.

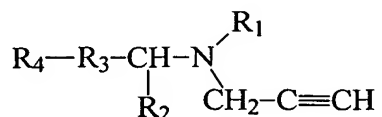
4. **(Currently Amended)** The method of claim 2 1, wherein R<sub>1</sub> is hydrogen.

5. **(Currently Amended)** The method of claim 2 1, wherein R<sub>1</sub> is alkyl.
6. **(Original)** The method of claim 5, wherein R<sub>1</sub> is methyl.
7. **(Currently Amended)** The method of claim 2 1, wherein R<sub>2</sub> is methyl.
8. **(Currently Amended)** The method of claim 2 1, wherein R<sub>3</sub> is methylene.
9. **(Currently Amended)** The method of claim 2 1, wherein R<sub>4</sub> is aryl.
10. **(Currently Amended)** The method of claim 2 1, wherein R<sub>4</sub> is phenyl.
11. **(Currently Amended)** The method of claim 2 1, wherein R<sub>5</sub> is methylene.
12. **(Currently Amended)** The method of claim 2 1, wherein R<sub>6</sub> is  
 $\text{—C}\equiv\text{CH}$
13. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound has the structure



wherein R<sub>1</sub> is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, or aryloxycarbonyl.

14. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound is represented by the structure:

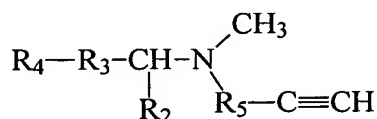


in which

R<sub>1</sub> is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, or aryloxycarbonyl;

$R_2$  is hydrogen or alkyl;  
 $R_3$  is a bond or methylene; and  
 $R_4$  is aryl or aralkyl; or  
 $R_2$  and  $R_4$ - $R_3$  are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group;  
and pharmaceutically acceptable salts thereof.

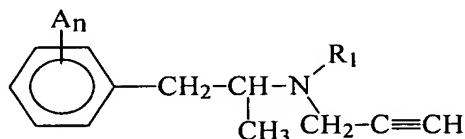
15. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound is represented by the structure:



in which

$R_2$  is hydrogen or alkyl;  
 $R_3$  is a bond or methylene; and  
 $R_4$  is aryl or aralkyl; or  
 $R_2$  and  $R_4$ - $R_3$  are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group; and  
 $R_5$  is alkylene, alkenylene, alkynylene and alkoxylenylene;  
and pharmaceutically acceptable salts thereof.

16. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound is represented by the structure:



in which

$R_1$  is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl;

A is a substituent independently selected for each occurrence from the group consisting of halogen, hydroxyl, alkyl, alkoxy, cyano, nitro, amino, carboxyl,  $\text{-CF}_3$ , or azido;

n is 0 or an integer from 1 to 5;

and pharmaceutically acceptable salts thereof.

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17. **(Original)** The method of claim 1, wherein the deprenyl compound is (-)-desmethyldeprenyl.

18. **(Cancelled)**